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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/530,196	08/22/2000	Nobuo Kimura	31981-160441	2129

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Venable
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Washington, DC 20043-9998

EXAMINER

JOHNSON, EDWARD M

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/530,196

Applicant(s)

KIMURA ET AL.

Examiner

Edward M. Johnson

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18, 21, 22 and 24-40 is/are pending in the application.
- 4a) Of the above claim(s) 21 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18 and 24-40 is/are rejected.
- 7) ☒ Claim(s) 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 40 is objected to because of the following informalities: "carried oiut" appears to be misspelled. Examiner suggests --carried out--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 18 and 24-39 are rejected under 35 U.S.C. 102(b) as being anticipated by WO97/00134 (U.S. Pat. No. 6,228,480 referred to for translation).

Regarding claim 18, Kimura '480 discloses a photocatalyst-carrying structure comprising a photocatalyst film laminated (see column 15, lines 44-46 and column 37, lines 12-15; laminating involves heat and pressing) onto a metallic substrate (see column 4, lines 8-9); and coating by dipping, drying the adhesive layer (see Examples 67-71), adding a silane coupler (see column 7, lines 39-41) and laminating (see column 15, lines 44-46 and column 37, lines 12-15). Kimura '480 does not

Art Unit: 1754

irradiate UV rays in UV-A range at a strength of 3 mW/cm² under an atmospheric temperature of 25 °C and relative humidity of 70%, the conditions upon which the recitation "capable of decomposing triolein at a rate of 5 µg/cm²/day" is made contingent.

Therefore, the claim is considered to be anticipated. Further, the recited physical properties appear to be inherent characteristics of the photocatalyst produced in the manner disclosed in Suzue '480, since it is produced with the same lamination step. See *In re Fitzgerald et al.*, supra.

Regarding claims 24-26, 35-39, Kimura '480 discloses a colored steel or aluminum plate (see column 13, lines 11-25), polyvinylchloride and polymethylmethacrylate resins (see column 14, lines 16-25).

Regarding claims 27, 31, and 34 Kimura '480 discloses 5 microns or less (see column 10, lines 57-63).

Regarding claim 28, Kimura '480 discloses a silane coupler (see column 7, lines 39-41).

Regarding claim 29, Kimura '480 discloses 0.001-5% silicon compound in the solution (see column 8, lines 58-61) and 10-50% silicon-modified resin (see column 8 lines 1-3).

Regarding claim 30, Kimura '480 discloses 0.001-5% silicon compound in the solution (see column 8, lines 58-61) and methyl trimethoxysilane (see column 9, lines 16-18) as silicon

Art Unit: 1754

compound, which is in an amount of 0.001 to 5% (see column 9, lines 26-30).

Regarding claim 32, Kimura '480 discloses 0.1-30% metal oxide sol (see column 9, lines 52-53) and titanium dioxide in an amount of 5% (see column 33, lines 28-30 and Table 6).

Regarding claim 33, Kimura '480 discloses silica sol acidified with nitric acid (see Examples 74-77) 2-60% silicon and 5-40% colloidal silica (see column 3, lines 35-38).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura '480.

Kimura fails to disclose 60-200°C.

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to conduct the laminating of Kimura at 60-200°C because Kimura '480 discloses the laminating "at a process for drying and winding at

Art Unit: 1754

the drying zone" (see Example 73) and drying the coated substrate at 150°C or less as a method to carry an adhesive layer on the substrate (see column 6, lines 19-27).

Response to Arguments

6. Applicant's arguments filed 2/2/05 have been fully considered but they are not persuasive.

It is argued that accordingly, it is obvious that this section in Kimura describes... via a sticker. This is not persuasive because the Examiner's position is that one skilled in the art would interpret the term "laminating" to inherently involve both heating and pressing in such a way as to not destroy the disclosed film or sticker, since that would destroy the disclosed invention of Kimura. And, in any case, at least some additional heat would be generated through at least friction by the winding and pressing disclosed in Kimura.

It is argued that the U.S. PTO Examiner's attention... Examples 86-88 of '480. This is not persuasive because those Examples were not relied upon by the Examiner.

It is argued that moreover, Kimura does not describe the structural result... heat pressing at 60-200°C. This is not persuasive because a method is claimed in the elected invention and not a structure. It is noted that the features upon which applicant relies (i.e., the structure of Fig. 1) are not recited

in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M.

Art Unit: 1754

Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0987.


Edward M. Johnson
Examiner
Art Unit 1754

EMJ
April 17, 2005